

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/975,348 10/11/2001 **Erwin Tomm** TMM 2 0006 9778 04/13/2004 7590 EXAMINER Steven M. Haas FLANDRO, RYAN M FAY, SHARPE, FAGAN, ART UNIT PAPER NUMBER

MINNICH & McKEE, LLP 1100 Superior Avenue, 7th Floor Cleveland, OH 44114-2518

3679 DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/975,348	TOMM, ERWIN
	Examiner	Art Unit
	Ryan M Flandro	3679
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
 Responsive to communication(s) filed on <u>23 January 2004</u>. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 		
Disposition of Claims		
4) ☐ Claim(s) 1-3 and 5-15 is/are pending in the app 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3 and 5-15 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ acce Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	vn from consideration. r election requirement. r. epted or b) objected to by the I drawing(s) be held in abeyance. Section is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 		
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 20040123. 5 Patent and Trademark Office.		

Art Unit: 3679

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

2. In view of Applicant's Amendment submitted 23 January 2004, the Examiner's objections to claims 1, 5 and 15 are hereby withdrawn.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-3, 5, 7-12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over B.V Industrie en Handelsonderneming CIFO (NL 7601311 A) (hereinafter referred to as "CIFO") in view of Briles (US 3,682,508).
 - a. Claim 1. CIFO clearly shows a lock for temporarily fixedly securing first and second associated pole sections 9,1 in a telescoped arrangement, said lock comprising a base 11 defining an axially extending through-bore adapted for close sliding receipt of an end portion of [the] first associated pole section 9; a neck 10 projecting from said base 11; a collar 12 connected to said neck 10 and radially constrictable relative to said base

Art Unit: 3679

11, said collar 12 defining an opening aligned with said axially extending throughbore of said base 11, said collar 12 adapted for close sliding receipt of [the] second associated pole section 1 partially telescoped into said first associated pole section 9, wherein said collar 12 is defined by first and second collar portions connected to said neck 10 and terminating in respective first and second ears 14 arranged in spaced-apart relation to each other (see 13), said ears 14 defining respective first and second bores 15; a fastener16 extending through said first and second bores 15 between said first and second ears 14, said fastener 16 including a head abutting said first ear 14, an unthreaded first portion (area adjacent head) frictionally engaged with a portion of said first ear 14 that defines said first bore to inhibit unintentional rotation of said fastener 16 and a threaded distal end (area opposite head) extending through said second bore 15 defined in said second ear 14 and projecting outwardly from said second ear 14; a lever 17 having a head defining a threaded aperture that is threadably engaged with the threaded distal end of said fastener 16, said lever 17 movable rotatably relative to said threaded distal end of said fastener 16 between an unlocked position in which said collar 12 slidably receives and accommodates the second associated pole section 1, and a locked position in which said head of said lever 17 is advanced on said threaded distal end of said fastener 16 toward said head of said fastener 16 and urges said second ear 14 toward said first ear 14 to constrict said collar 12 radially relative to said base 11 into frictional gripping engagement with the second associated pole section 1 received in the collar 12 (see figures 1 and 2). CIFO further shows and discloses that said first portion of said fastener 16 defines an unthreaded rectangular comformation that is located in said first bore 15

Art Unit: 3679

defined by said first ear 14 with a tight frictional fit sufficient to restrain said fastener 16 against rotation in response to movement of said lever 17 between said unlocked and said locked positions, but does not disclose that said fastener 16 is cylindrical nor does it disclose that fastener 16 is selectively rotatable via application of torque to said head sufficient to overcome said tight frictional fit between said unthreaded cylindrical comformation and said first ear 14.

Briles, however, teaches a first portion 15b of a fastener 16 which defines an unthreaded cylindrical comformation that is located in a first bore 12 with a tight frictional fit sufficient to restrain said fastener 16 against rotation in response to movement of a lever 19 between unlocked and locked positions, as well as that said fastener 16 is selectively rotatable via application of torque to a head 15c sufficient to overcome said tight frictional fit between said unthreaded cylindrical comformation 15b and said first bore 12 (see figures 1 and 2; columns 1-3). Briles teaches such a fastening configuration for the purpose of providing an effective way to tighten the connection to a predetermined torque. As currently constructed, the matching square cross-section of the CIFO fastener and first bore prevents rotation absolutely which can result in an over torqued connection. The teaching of Briles provides for a similar rotation-preventing fastener-bore as CIFO but also provides a means by which a predetermined torque can be reached. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the squared fastener-bore connection of CIFO to instead be a cylindrical interference fit as taught by Briles so that a predetermined level of torque can be reached in tightening.

Art Unit: 3679

- b. Claim 2. CIFO further shows each of said collar portions **12** are spaced axially from said base **11** (see figures 1 and 2).
- c. Claim 5. CIFO further shows that said axially extending through-bore defines first and second cylindrical portions (inner portions of collar 12 and base 11, respectively), said second cylindrical portion having a smaller diameter than said first cylindrical portion and located axially between said first portion and said neck 10 (see figures 1 and 2).
- d. Claim 7. CIFO shows a telescoping pole apparatus comprising a first pole section 9 defining a first bore (inner tubular area of 9); a second pole section 1 slidably located in said first bore of said first pole section 9 in a telescoping arrangement; a lock connected to said first pole section 9 and adapted to secure said second pole section 1 axially relative to said first pole section 9, said lock comprising a base 11 defining an axial through-bore, wherein an end portion of said first pole section 9 is located in said axial through-bore; a collar 12 connected to said base 11 and selectively radially constrictable relative to said base 11, said collar 12 defining an opening aligned with said axial through-bore, said second pole section 1 projecting from said first bore of said first pole section 9 and through said opening of said collar 12, said collar 12, when radially constricted relative to said base 11, firmly engaging and retaining said second pole section 1 in an axially and rotatably fixed position relative to said first pole section 9; a fastener 16 connected to and frictionally engaged with said collar 12 so as to be restrained against unintended rotation relative to said collar 12; said fastener 16 comprising a head at a first end and a threaded second end that projects outwardly from

Art Unit: 3679

said collar 12; a control member 17 that mates threadably with said threaded end of said fastener 16; said control member 17 selectively manually rotatable relative to said fastener 16 in first and second directions to constrict and expand said collar 12 radially, respectively, said fastener 16 restrained against rotation with said control member 17 by frictional engagement between said fastener 16 and said collar 12 (see figures 1 and 2; as well as Applicant's translation of pages 2-4).

CIFO lacks disclosure that said fastener 16 is selectively rotatable upon application of torque to said head sufficient to overcome said frictional engagement between said fastener 16 and said collar 12.

Briles, however, teaches a fastener 16 that is selectively rotatable via application of torque to a head 15c sufficient to overcome any frictional engagement between said said fastener 16 and a collar 11 (see Briles figures 1 and 2; columns 1-3). Briles teaches such a fastening configuration for the purpose of providing an effective way to tighten the connection to a predetermined torque. As currently constructed, the matching square cross-section of the CIFO fastener and first bore prevents rotation absolutely which can result in an over torqued connection. The teaching of Briles provides for a similar rotation-preventing fastener-bore as CIFO but also provides a means by which a predetermined torque can be reached. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the squared fastener-bore connection of CIFO to instead be a cylindrical interference fit as taught by Briles so that a predetermined level of torque can be reached in tightening.

Application/Control Number: 09/975,348 Page 7

Art Unit: 3679

e. Claim 8. CIFO further shows said control member 17 comprising a lever including a head defining a threaded aperture that receives said threaded end of said fastener 16; and a shank extending from said head and defining a wide flat tab (see figures 1 and 2).

- f. Claim 9. CIFO further shows a neck 10 projecting outwardly from said base 11, wherein said collar 12 is connected to said neck 10 and axially spaced from said base 11 (see figures 1 and 2).
- g. Claim 10. CIFO further shows said collar 12 including first and second collar portions that are connected to and project outwardly from said neck 10, said first and second collar portions terminating in respective first and second terminal ends 14 that are spaced apart from each other and defined therebetween a gap 13 in said collar 12 (see figures 1 and 2).
- h. Claim 11. CIFO further shows said first and second terminal ends 14 of said first and second collar portions defining respective first and second apertures 15 aligned with each other, wherein said fastener 16 extends through aligned first and second apertures 15 (see figures 1 and 2).
- i. Claim 12. CIFO further shows said fastener 16 comprises a head opposite said threaded end and a portion adjacent said head that frictionally engages said first terminal end 14 of said first collar portion whereby said fastener 16 is held against unintended rotation relative to said first and second collar portions upon rotation of said control member 17 relative to said fastener 16 (see figures 1 and 2).

Art Unit: 3679

- j. Claims 3 and 14. CIFO further shows said base 11, said neck 10 and said collar11 are defined as a one-piece molded plastic construction (see figure 1).
- Claim 15. CIFO shows a lock apparatus for securing first and second telescoping k. pole sections 9,1 relative to each other, said apparatus comprising a first portion 11 adapted for connection to an end portion of a first associated pole section 9; a second portion 12 connected to said first portion 11 and defining a collar 12 that is selectively radially constrictable relative to said first portion 11 and adapted for receipt of a second associated pole section 1 partially telescoped into said first associated pole section 9, said collar 12, when radially constricted, firmly engaging and fixedly retaining a second associated pole section 1 received thereby, said collar 12 comprising first and second ears 14 separated from each other by a space 13; a screw 16 extending through said first and second ears 14 of said collar 12 and including a headed end and an opposite threaded end, said screw comprising an unthreaded rectangular portion that is tightly frictionally engaged with only one of said first and second ears 14, and a lever 17 operably coupled to said threaded end of said screw 16 and adapted for rotation in a first direction on said screw causing said lever 17 to be advanced on said screw 16 towards said headed end so that said collar 12 is radially constricted, and adapted for rotation in a second direction opposite said first direction so that said lever 17 moves away from said headed end of said screw 16 and said collar 12 resiliently radially expands, wherein said tight frictional engagement between said unthreaded portion of said screw 16 and said one of said first and second ears 14 restrains said screw 16 against unintended rotation with said lever 17 when said lever 17 is moved in said first and second directions (see figures 1 and 2).

Art Unit: 3679

CIFO lacks disclosure that said screw 16 is cylindrical as well as that it is selectively manually rotatable relative to said first and second ears 14 upon application of sufficient torque to said headed end to overcome said frictional engagement between said cylindrical portion of said screw 16 and said one of said first and second ears 14.

Briles, however, teaches a screw 16 having a cylindrical unthreaded portion 15b that is tightly frictionally engaged with a bore 12 as well as that said screw 16 is selectively manually rotatable upon application of sufficient torque to a headed end 15c to overcome said frictional engagement between said cylindrical portion 15b and said bore 12 (see figures 1 and 2; columns 1-3). Briles teaches such a fastening configuration for the purpose of providing an effective way to tighten the connection to a predetermined torque. As currently constructed, the matching square cross-section of the CIFO fastener and first bore prevents rotation absolutely which can result in an over torqued connection. The teaching of Briles provides for a similar rotation-preventing fastener-bore as CIFO but also provides a means by which a predetermined torque can be reached. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the squared fastener-bore connection of CIFO to instead be a cylindrical interference fit as taught by Briles so that a predetermined level of torque can be reached in tightening.

5. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of CIFO and Briles, as applied above, in view of Fullerton (US 5,324,150). CIFO shows a threaded distal end of the fastener 16 but does not disclose or teach that the threaded

Art Unit: 3679

distal end of the fastener 16 defines a double lead left-handed thread. Nevertheless, as taught by Fullerton, "[o]ne skilled in the art will recognize at once that threads can differ in many other ways, including, for example, lead, the number of thread (single, double, triple threads), the direction or 'handedness' of the thread (right-handed or left-handed)...." Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a double lead left-handed thread at the end of the fastener of CIFO since such a configuration is commonly known within the art as taught by Fullerton.

Response to Arguments

6. Applicant's arguments, see amendment filed 1/23/2004, with respect to the rejection(s) of claim(s) 1-3 and 4-15 under 35 USC §102 have been fully considered and are persuasive in view of the translation of CIFO. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the teachings of Briles.

Allowable Subject Matter

7. Upon reconsideration, claim 5 is no longer indicated as allowable.

Conclusion

8. This action is NON-FINAL.

Art Unit: 3679

Page 11

9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ryan M Flandro whose telephone number is (703) 305-6952.

The examiner can normally be reached on 8:30am - 5:30pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMF

Lynne H. Browne Supervisory Patent Examiner

Technology Center 3670